Technical Issues Committee Meeting Notes 7 November 2005

Attendees: Stephen Clark, Pacific EcoRisk Lenwood Hall, University of Maryland

Joe McGahan, Westside San Joaquin River Watershed Coalition (Westside Coalition)

Matt Reeve, CA. Department of Food and Agriculture

Dr. Karl Longley, Central Valley Water Board

Sandy Nurse, Sierra Foothill Laboratory

Mike Johnson, UC Davis

Wendy Cohen, Central Valley Water Board

Dan Waligora, Department of Fish and Game

Claus Suverkropp, Larry Walker and Associates

John Swanson, Central Valley Water Board

Jenny Gain, Brown & Caldwell

Don Weston, UC Berkeley

Marshall Lee, Department of Pesticide Regulation

John Meek, San Joaquin and Delta Water Quality Coalition

Leticia Valadez, Central Valley Water Board

Bill Thomas, Southern San Joaquin Water Quality Coalition

Bill McKinney, East San Joaquin Water Quality Coalition

Margie Lopez-Read, Central Valley Water Board

Opening Remarks:

Dr. Karl Longley noted that the 16 November 2005 SWRCB meeting will not include generalized discussion of salt programs, as it has been postponed. Dr. Longley stated that he would like to see a statewide program for salt issues with a 30 to 40 year vision. He also stated that some water that is not currently being used for salt dilution could be used for that purpose. Additionally, he believes that the Santa Ana project could be used as a model for other salt projects.

An announcement for a California Bay Delta Authority grant opportunity for agriculture was made available for TIC members at the meeting.

Introductions:

Attendees at the meeting identified themselves and their affiliations.

TOPIC: FOCUS GROUP UPDATES

There may be a need to restructure or redirect focus groups, based on the need to discuss Monitoring and Reporting Programs (MRPs). Central Valley Water Board staff has withdrawn the proposed revised MRPs from the Waiver renewal package that will be presented to the Regional Board on 28 November 2005. Technical issues with regard to the MRPs could be discussed within the TIC, with recommendations to be made no later than six months from now. Water Board staff will consider recommendations and

propose revised MRPs for public comment. The EO would then issue the proposed MRPs.

Several attendees commented that time would be needed to implement any changes to the MRPs to produce revisions to the MRP Plans and QAPPs.

1. Laboratory Workshop on Pyrethroids

The laboratory workshop on pyrethroids was held 31 August. Two developments as a result of the workshop are the initiation of a laboratory round-table group to discuss labrelated issues such as methods, detection limits, etc., and the proposed round-robin laboratory study for pyrethroids to evaluate interested labs' abilities to identify and quantify pyrethroids, particularly in sediment.

A lab round-table conference call was tentatively scheduled for 29 November, but this is the date of the Board meeting and may be changed. The purpose of that meeting will be to discuss the Practical Quantitation Limits (PQLs) that are included in Table 1 of the draft MRP, and assess the difficulties or capabilities that laboratories will have in meeting those PQLs. Joe McGahan and Stephen Clark asked to be included on the distribution list for the lab round table discussions; all TIC members will be notified.

Lenwood Hall commented that the National Bureau of Standards has formal guidelines established on how to perform a Round Robin, and Board Staff may want to consider this for the sediment pyrethroids round robin testing. He will provide a copy of the guidelines to Water Board staff.

2. Sediment Toxicity Focus Group

It was discussed and resolved in previous meetings that the growth endpoint for Hyalella would not be required for the Irrigated Lands Program. Coalition groups must submit a letter stating that they would like to take advantage of this option (not to report the growth endpoint) in response to a letter sent by the EO. This letter option is in lieu of submittal of an MRP Plan revision.

The Westside Coalition has sent in this letter, and Mike Johnson reported that the East San Joaquin Water Quality Coalition and the San Joaquin County & Delta Water Quality Coalition have also sent in letters.

A focus group conference call was held on 2 November to re-establish the group's function and identify discussion topics for recommendation to the TIC, including sediment chemical analyses, appropriate follow up for coalitions after observed sediment toxicity, pyrethroids methods and detection limits, sediment Toxicity Identification Evaluation (TIEs), and objectives.

3. Triggers Focus Group

It was discussed that the 50% trigger for conducting a TIE is in the current Coalition Group MRP, which was revised in August. This was a major effort on the part of the

Focus Group. The next charge for the group is the action that should take place when there is significant toxicity is identified between 0% and 50%. These actions will include resampling and reporting as described in the draft Coalition Group MRP.

There was an inquiry regarding the necessity of different MRPs for individuals, coalitions and water districts. Water Board staff responded that individual dischargers are different from coalitions in that they are responsible for monitoring only what their individual farm uses, whereas coalitions don't really know what all is being applied, and therefore they have to monitor for a broader list. Water districts are altogether different in that they do not have irrigated land, but may receive drainage from irrigated lands. Several water districts have filed as individual dischargers, but the farm level approach in the Individual Discharger MRP does not fit water district operations.

Bill Thomas commented on the amendments proposed to the MRP and the effect they would have on the existing Coalition MRP plans. It was stated that the Coalition MRP plans have already been submitted and approved by the Board. If the Board decides to make changes to the MRP, then a reasonable schedule should follow allowing for the Coalition MRP plans to be amended. He suggested 60 days. He also commented that the current MRP is not clear on the guidelines for triggers and re-sampling requirements. There is no trigger in the MRP for re-sampling, and no guidance on specifically where, when and how often to re-sample.

Water Board staff clarified that the Board itself has not approved any Coalition MRP Plans, with the possible exception of the Rice Commission MRP Plan. Some of the other MRP Plans had received approval by the Executive Officer, while still others need to receive an approval.

There was discussion that "Triggers" need to be discussed and benchmarks need to be set not only in order to minimize costs, but also to improve organization and communications. Simply stating that the trigger should be "statistical significance" is insufficient. For example, when there is very little difference between replicate tests, the statistics will be very tight. In this case, minimal differences in survival could trigger rather expensive follow-up actions that perhaps are not warranted. Better triggers need to be defined.

It was suggested that once the triggers are identified, a flowchart should be developed for toxicity, triggers, and re-sampling to clarify the process. A flowchart would turn a page of text into an understandable picture, eliminating confusion and frustration in having to sort through the text. It was mentioned that the Surface Water Ambient Monitoring Program (SWAMP) program uses a 20% difference from control as the minimum trigger for any action after a toxicity test, and this could be used as a precedent or model, should the focus group decide to make that recommendation.

4. Nutrient Focus Group

Bill Thomas commented that at the last meeting it was discussed that they needed to gather more information to determine the nature of the problem associated with nutrients in irrigated land runoff. He suggested looking to other Boards and programs for this.

Mike Johnson had agreed to talk to an associate at UC Davis, Randy Dahlgren about various nutrient-related studies that he thought he had completed, but it turns out that there were none. However, Mr. Dahlgren would be willing to discuss and present some findings about nutrients in the Central Valley. For the nutrients in particular there was discussion about whether we want the monitoring data to define the problem or let the problem define our monitoring.

5. Bioassessment Focus Group

This was not discussed at the TIC meeting, but the Bioassessment focus group has been put on hold until more information can be made available about coordinated monitoring (Bioassessment alongside toxicity or chemistry).

6. Discussion on Pending Issues on MRPs

The group discussed the issues related to the MRPs, and the following summarizes the key points:

- 1. Change some administrative aspects of the MRP:
 - Add language to allow time for dischargers to revise MRP Plans
 - Discuss options for aerial photos (color vs. black & white)
 - Discuss signatory responsibilities
- 2. Reporting Requirements need to be discussed, such as:
 - Levels of signature under penalty of perjury (laboratory, Project Manager)
 - Electronic data submittal (format and comprehensiveness)
 - Explain the need for electronic data
 - Need for the quantity of submittal of laboratory raw data, etc.
 - Timing of submittal of various technical reports (especially exceedances)
 - Exceedance report timelines for field measured data
- 3. Triggers for various actions
 - Trigger for re-sampling and timing
 - Specific contaminants (or groups of contaminants) that require re-sampling
 - Compliance monitoring (2 upstream, timing, etc.)
 - Storm event monitoring
 - "Cut-off" language or criteria for stopping upstream sampling
 - Include a flow chart in MRP to elucidate action after various triggers

4. Source Identification

- Process for factoring in magnitude of problem and set priorities for re-sampling.
- Other means to identify problem (e.g. PUR database)
- Upstream sampling in irrigation season only (eliminating requirement for storm events)
- Practicality of a forensic approach

5. Table 1 – Minimum analytical monitoring requirements

- Discussion on phases and new long-term monitoring strategy
- Re-evaluate technical reason behind some of the contaminants on the list (e.g. some pesticides, flow and load, etc.)
- Re-evaluate (or describe rationale) for bacteriological contaminants (E. coli vs. fecal coliform and methods)
- Re-evaluate list of method numbers in Table 1 to be more inclusive (e.g. Method 8270 with SIM for pyrethroids, membrane filtration for coliform)
- Provide for some performance-based methods or method equivalents, especially where low MDLs are required
- Nutrients table should possibly be relabeled "other toxicants"
- Detection limits for nutrients should be discussed
- Need for identification of unknown peaks/ submission of chromatograms with unknown peaks
- Re-evaluate the PQLs that are being requested, based on laboratory capabilities

Next Meetings (tentative):

6 December 2005 to determine the schedule for the next 5 months with respect to MRP discussions.

31 January 2005 and 2nd Tuesday of each month starting in February with discussions to be determined on 6 December.